

APPENDIX

AMENDMENT TO THE CLAIMS

Claims 1-9 (Canceled).

Claim 10 (Currently amended): A method for protecting a porcine animal against infection or disease caused by *Mycoplasma hyopneumoniae* comprising the step of administering to said porcine animal a vaccine composition by intramuscular, subcutaneous, oral or intranasal route, wherein said vaccine which comprises an immunizing amount of a *Mycoplasma hyopneumoniae* bacterin[;], an adjuvant mixture comprising a polyacrylic acid polymer and a mixture of metabolizable oil and a polyoxyethylene-polypropylene-polyoxyethylene-polyoxypropylene block copolymer[;] and a pharmaceutically acceptable carrier, wherein said which vaccine composition, after a single administration, elicits protective immunity in said porcine animal against said from *Mycoplasma hyopneumoniae* infection or disease for a duration of six months after the single administration; and wherein the step of administering to said porcine animal is done by a method chosen from the group consisting of, intramuscular injection, subcutaneous injection, oral administration and nasal administration.

Claim 11 (Previously presented): The method of claim 10, wherein the immunizing amount of said bacterin is about 1×10^8 to 3×10^{11} *Mycoplasma hyopneumoniae* DNA Cell equivalents[,.] (MHDCE)/mL (MHDCE/mL).

Claim 12 (Previously presented): The method according to claim 11 wherein the immunizing amount of said bacterin is about 1×10^9 to 3×10^9 MHDCE/mL.

Claim 13 (Canceled).

Claim 14 (Currently amended): The method of claim 10, wherein the adjuvant mixture consists of a polyacrylic acid polymer and a mixture of metabolizable oil that comprises one or more

terpene hydrocarbons and a ~~polyoxyethylene-polypropylene-polyoxyethylene-polyoxypropylene~~ block copolymer present in a final concentration of about 1-25% v/v.

Claim 15 (Currently amended): The method of claim 14, wherein the polyacrylic acid polymer of the adjuvant mixture is ~~Carbopol-a polymer of acrylic acid cross-linked with polyallylsucrose having the chemical formula (CH₂CHOOOH)_n~~.

Claim 16 (Previously presented): The method of claim 14, wherein the metabolizable oil of the adjuvant mixture is a terpene hydrocarbon selected from the group consisting of squalene and squalane.

Claim 17 (Currently amended): The method of any claims ~~10-16, 10-12 and 14-16~~, further comprising coadministering at least one additional bacterin selected from the group consisting of *Haemophilus parasuis*[[;]], *Pasteurella multocida*[[;]], *Streptococcus suis*[[;]], *Actinobacillus pleuropneumoniae*[[;]], *Bordetella bronchiseptica*[[;]], *Salmonella choleraesuis*[[;]] and *leptospira*.

Claim 18 (Canceled).